#### CONNECTICUT SITING COUNCIL

REOPENED DOCKET 316 FOR AN	
AMENDED CERTIFICATE OF	
ENVIRONMENTAL COMPATIBILITY )	DOCKET NO. 316 A
AND PUBLIC NEED FOR	
MODIFICATIONS TO THE HEIGHT AND	MAY 26, 2011
PERMITTED ANTENNA )	
CONFIGURATIONS ON AN EXISTING )	
TELECOMMUNICATION TOWER )	
FACILITY LOCATED AT 50 FAIRCHILD )	
ROAD, MIDDLETOWN, CONNECTICUT	

# SBA & AT&T STATEMENT AND MATERIALS IN SUPPORT OF REOPENED DOCKET 316A

## I. Principal Parties & Intervenors to Reopened Docket 316A

SBA Infrastructure, LLC ("SBA") is a tower company that holds the Certificate for the tower facility approved in Docket No. 316. The tower is located at 50 Fairchild Road in the City of Middletown, Connecticut. The existing tower facility was approved in 2006 as a 120 foot monopole with flush mounted antenna configurations. New Cingular Wireless PCS, LLC ("AT&T") has proposed modifications to the existing tower facility including a 10' tower extension and low profile platform to accommodate several sets of antennas and ancillary equipment on the tower ("AT&T Modifications"). AT&T is licensed by the Federal Communications Commission ("FCC") to provide wireless services in this area of the State of Connecticut. A copy of AT&T's several FCC licenses are included in Exhibit A. SBA and AT&T have been grouped together as the Applicant in Reopened Docket No. 316A.

# II. Procedural History of Reopened Docket 316A

The Council's 2006 Decision and Order, Opinion and Findings of Fact in Docket 316 are included in Exhibit B. On February 28, 2011, AT&T filed a Petition for a Declaratory Ruling with the Siting Council seeking various relief including a legal interpretation that the proposed AT&T Modifications did not require an amended Certificate. AT&T also sought, in the alternative, approval by declaratory ruling that a 20' tower extension with flush mount antennas and equipment would not require an amended Certificate. AT&T's Petition was subsequently identified as No. 988, a site visit and staff report were prepared, and abutters were formally notified of the proposed AT&T Modifications and pending Petition before the Siting Council. On March 31, 2011, the Council considered Petition No. 988 and all requests for relief were denied. The Council simultaneously reopened Docket No. 316 pursuant to Section 4-181(a)(b) to determine whether changed conditions exist to support a modification to the original Decision & Order and allow for non-flush mounted antenna configurations on the tower.

# III. Existing Nextel, Verizon, Pocket and Clearwire Facilities

There are four (4) carriers approved for and using the 120' tower approved in Docket 316. Nextel was the original carrier and Verizon, Pocket, and Clearwire all have approved facilities down to the 90' AGL level. See CSC Exempt Modification Acknowledgements Nos. 083-0804041, 083-080924A and 083-100401.

# IV. Proposed AT&T Modifications

AT&T proposes to extend the existing 120' monopole tower by 10 feet and mount nine (9) panel antennas, along with nine (9) tower mounted amplifiers ("TMAs"), 3 remote radio head ("RRH") units and ancillary equipment at a centerline height of 130' AGL on a low profile

platform mount. A 12' x 20' equipment shelter and a backup power diesel generator are proposed within the existing compound. Included as Exhibit C are detailed construction drawings prepared by FDH Engineering, Inc ("FDH"), which include tower modification and extension details. Also included as Exhibit C are compound plan, elevation and antenna details prepared by Clough Harbour & Associates, LLP ("CHA"). Annexed hereto as Exhibit D is a structural report dated December 28, 2010 prepared by FDH and noting that the existing tower and foundation can support the tower extension and proposed AT&T antenna loading with minor modifications. Specifically, the tower's base plate and anchor bolts require some reinforcement to accommodate the increased loading for the tower extension along with other antenna and cabling recommendations.

## V. 2006 Application, 2G Wireless Service & Flush Mount Antenna History

The 2006 Application in Docket 316 as submitted by the tower developer, Optasite, Inc., proposed a 120' monopole tower expandable to 150' in height with numerous antenna platforms. Nextel as the anchor tenant proposed up to 12 panel antennas on a platform at the 120' level of the tower. At that time, Nextel was seeking coverage and capacity in a 2G wireless environment (i.e. digital networks) based on iDEN. Nextel had also just merged with Sprint.

As was the case with many Dockets at that point in time and the development of wireless infrastructure in the State, the Council explored alternative tower structures and antenna configurations. The Council generally noted that coverage could be provided from a flushmount antenna configuration despite operational limitations even in a 2G environment. As many members of the Council will recall, carriers universally stated in various Dockets that flush mount antenna configurations might require more than one vertical elevation on a tower per carrier to address capacity, that specific changes in customer demand for services could require

additional antennas in the future and that technological advances in the coming years might not be deliverable with flush mount only antenna configurations on towers.

In Docket 316 itself, the Council acknowledged many of the trade offs and disadvantages of flush mount antennas in its own Findings of Fact. See FOF 80-85. The Council also noted the following in its Opinion:

There was much discussion about whether or not the proposed tower should be a "brown stick," a low-profile design intended to minimize visual impact. The conclusion of this discussion was that it was preferable to mount the antennas in a way that would create less of a profile than the platform mounting preferred by Nextel. Flush-mounted antennas were deemed to be an acceptable way to achieve this lower profile.

From reviewing the overall visibility of the tower which is limited, the Findings of Fact and the Council's prior Opinion, it is respectfully submitted, that the requirement for flush mount antennas in Docket 316 was not necessarily related to an overwhelming and specific visual impact associated with platforms, rather a desire to minimize visibility consistent with the need of Nextel at that time.

# VI. Gaps in Coverage and Customer Demand for 4G Services Necessitate This Tower Site's Expansion and an AT&T Platform to Support Antennas & Infrastructure

The legal standard of review in Reopened Docket 316A is whether there are changed conditions that warrant a modification to the Decision & Order to allow a 10' expansion of the tower and relief from the flush mount only antenna limitation. The Council does not have to find a public need for the facility as part of reopening Docket 316. Rather, at the heart of Reopened Docket 316A is whether there are changed conditions that warrant relief from Condition Nos. 1 and 2 of the Council's Decision & Order and approval of AT&T's Modifications.

### A. Tower Height Expansion v. New Tower Construction

AT&T currently has gaps in reliable service in this area of Middletown and the proposed facility is needed to fill some of these existing coverage gaps within AT&T's network. AT&T initially sought new tower sites to the southwest of this area of Town near Route 9's intersection with Randolph Road. AT&T's radiofrequency engineers did review the SBA tower approved in Docket 316 and rejected the only available antenna height of 80' on the existing tower. After much internal deliberation, AT&T's radiofrequency engineers agreed to pursue shared use of this existing tower at a height of 130' as compared with proposing a completely new tower site at a leased property candidate near the Route 9/Randolph Road intersection which might provide better coverage in its network in that area of the City. Annexed hereto in Exhibit E are AT&T radio frequency coverage plots which depict existing and proposed coverage from the site at 130' AGL. AT&T's coverage analysis fully demonstrates the need for a 10' tower extension in providing reliable wireless services to the public and that such an expansion avoids the proliferation of new tower construction in the State consistent with Section 16-50aa of the Connecticut General Statutes.

#### B. Platform v. Flush Mount Antenna Configurations

In the past five years since Docket 316 was decided, the wireless industry has experienced unprecedented growth, technological evolution, consumer demand and fundamental changes that directly impact the infrastructure needed to deliver reliable wireless services to the public. While flush mount antenna configurations will still have a place in select environments and AT&T will propose them in unique settings, the utility and viability of flush mount antenna configurations have become severely diminished. Indeed, legal limitations requiring flush mount

5

antennas on existing tower sites can represent significant barriers to entry by effectively limiting shared use of tower structures by multiple carriers and imposing significant operational constraints on the delivery of enhanced wireless services to the public.

In the case of Middletown and the existing tower owned by SBA, AT&T notes that the coverage area includes significant mobile traffic and stationary users in denser commercial and residential areas of the City. To meet coverage and capacity requirements in this part of the City, nine panel antennas are being proposed by AT&T which will transmit 3 different frequencies (Cellular, PCS, and 700 Mhz). As such, if AT&T were limited to flush mount antenna configurations, a minimum 20' tower extension would be required with up to six antennas clustered around two centerline elevations.

Additionally, this tower site in Middletown is one of AT&T's initial sites planned for the deployment of its LTE (Long Term Evolution) technology. AT&T is the only carrier that will offer two layers of network technology that deliver 4G speeds: HSPA+ and LTE. LTE is expected to deliver faster speeds required for a mobile broadband environment that allows technology to evolve and which will give Connecticut businesses and residents greater functionality from their handsets. Greater functionality and speed are what the public demands from wireless carriers over its dedicated wireless networks. Such wireless improvements support overall economic development in the State with reliable mobile broadband services.

With respect to AT&T's LTE infrastructure, remote radio heads are proposed to be mounted as close to its antennas as possible. Having the RRHs mounted on the tower close to the antenna eliminates cable loss and allows AT&T to achieve the fastest possible data speeds in its LTE network. Additionally, by deploying RRH's on the tower itself, power and telco distribution by fiber eliminates many of the coaxial runs needed inside towers. While LTE can

be deployed without a platform, the RRHs would still be proposed on the tower with collar mounts (i.e. flush mounted) in addition to the nine antennas. As such, to accommodate AT&T's LTE infrastructure at this site in a "flush mount" configuration would require still more vertical tower space and potentially a 30' tower extension.

Importantly, other competing carriers already providing coverage from the existing tower will likely seek to deploy additional antenna infrastructure in the near future. Most all of these existing carriers are in the process of statewide network improvements that involve their versions of 4G services and/or network improvements. However, there simply is no space on the existing tower approved in Docket 316 for those carriers to expand vertically, even in a flush mount antenna configuration. As such, this existing tower simply cannot meet current and future carrier infrastructure requirements and the public's demand for reliable, faster and more robust wireless services.

# VII. The Environment Surrounding the Tower is Largely Unchanged

Environmental conditions and land use patterns surrounding the tower site remain largely unchanged since the Council's approval in 2006. There are no specific environmental resources of statewide significance in the area of the existing tower. The site itself is still wooded and well removed from adjacent properties. As such, there are no known material changes to environmental conditions from those as documented in the Council's Findings of Fact from 2006.

# VIII. There are no Adverse Environmental Effects from the Tower Extension and Proposed AT&T Platform

A comparison of existing and proposed conditions reveals no substantial adverse environmental impacts associated with AT&T's Modifications to the existing tower facility.

## A. Minimal Physical Impact

AT&T's at grade equipment will all be located within the approved cleared tower compound with no changes to the tower site, access or utilities. These site modifications would all meet the regulatory exemption criteria specified in Section 16-50j-72 of the Council's regulations.

## B. Compliance with MPE Limits

The operation of AT&T's antennas will not increase the total radio frequency electromagnetic power density at the site to a level at or above the applicable standards. A power density report is included as part of Exhibit F along with MPE information on file with the Council. The total radio frequency power density will be well within standards adopted by the Connecticut Department of Environmental Protection as set forth in Section 22a-162 of the Connecticut General Statutes and the MPE limits established by the Federal Communications Commission.

### C. Visibility

As demonstrated in the visual materials included in Exhibit G, the proposed AT&T Modifications will not have a significant adverse visual impact on the surrounding area. The extension requires no FAA lighting or marking as noted in the Towair report also included in Exhibit G. Additionally, photosimulations of the extension show only marginal additional visibility from areas that already have views of the tower. As such, AT&T respectfully submits that the added visibility of the tower extension and low profile antenna platform is neither significant nor adverse for purposes of the Council's regulatory considerations in Reopened Docket 316A.

#### VI. Conclusion

As more fully set forth above, wireless technologies and consumer demand have changed dramatically since the Council's original approval of the tower in Docket 316. New methods of delivering wireless services and mobile broadband speeds demanded by the public necessitate more antennas and related infrastructure for carriers including AT&T. The proposed AT&T Modifications to the existing monopole tower approved in Docket No. 316 are wholly consistent with legislative findings outlined in Section 16-50g and 16-50aa of the General Statutes of Connecticut that seek to avoid the unnecessary proliferation of towers in the State. Further, there are no known adverse environmental effects associated with the modifications. The 10' added tower height is required for new AT&T coverage in this part of the Middletown and a platform reasonably required for AT&T's LTE and other services to be provided to the public. As such and for all the foregoing reasons, AT&T respectfully submits that conditions have changed which warrant modifying the Decision & Order in Docket 316 to allow for a 130' tower with antennas and other equipment on a platform extending to an overall height of 133' AGL.

Respectfully Submitted,

Christopher B. Fisher

On behalf of the Applicants

cc: Prior Parties & Intervenors

Mayor Sebastian N. Giuliano, City of Middletown

Michele Briggs, AT&T

#### CERTIFICATE OF SERVICE

I hereby certify that on this day, an original and fifteen copies of Cuddy & Feder LLP's May 25, 2011 Submission (in support of reopened Docket 316A) were served on the Connecticut Siting Council by overnight mail with a copy by overnight mail to:

Carrie L. Larson, Esq., Pullman & Comley, LLC 90 State House Square Hartford, CT 06103-3702 (860) 424-4312 clarson@pullcom.com

Thomas J, Regan, Esq., Brown, Rudnick, Berlack, Israels, LLP 185 Asylum Street, City Place I Hartford, CT 06103-3402 (860) 509-6522 tregan@brownrudnick.com

Barbara Melia 379 Bow Lane Middletown, CT 06457 (860) 346-4334 Bardebdave@yahoo.com

Debora Bagley Michael Bagley 393 Bow Lane Middletown, CT 06457 (860) 346-5373

Earle Roberts 785 Bow Lane Middletown, CT 06457 (860) 346-0068 Eroberts4675@sbcglobal.net

Dated: May 26, 2011

Christopher B. Fisher